



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	10/602,692	Confirmation No.:	1379
Applicant:	Sommadossi <i>et al.</i>		
Filed:	June 20, 2003		
TC/A.AU.:	1623		
Examiner:	Unassigned		
Docket No.:	06171.105071 IDX 1006 CON3		
Customer No.:	20786		
Title:	Methods and Compositions for Treating Flaviviruses and Pestiviruses		

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

REFERENCES

BOX 1 OF 2



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/602,692 Confirmation No.: 1379  
Applicant: Sommadossi *et al.*  
Filed: June 20, 2003  
TC/A.AU.: 1623  
Examiner: Unassigned  
  
Docket No.: 06171.105071 IDX 1006 CON3  
Customer No.: 20786  
Title: Methods and Compositions for Treating Flaviviruses and Pestiviruses

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

**Transmittal of Information Disclosure Statement**

Sir:

The citation of information on the attached Form PTO-1449 is made pursuant to 37 C.F.R. §§ 1.56, 1.97, and 1.98. Copies of all references are enclosed. The citation of this information does not constitute an admission of priority or that any cited item is available as a reference, or a waiver of any right the applicant may have under applicable statutes, Rules of Practice in patent cases, or otherwise.

Because this Information Disclosure Statement is being submitted before the mailing of a first Office action on the merits, the Applicants do not believe that any additional fees are due; however, the Commissioner is hereby authorized to charge any fees due or credit any overpayment to Deposit Account No. 11-0980.

Respectfully submitted,

Sherry M. Knowles, Esq.  
Reg. No. 33,052

King & Spalding, LLP  
191 Peachtree Street, N.E., Atlanta, GA 30303  
Office: (404)572-4600/ Fax: 404-572-5145

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in 2 boxes addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on March 2, 2004

  
Jennifer A. Williams

3425704 1.DOC

MAR 09 2004

PTO/SB/08A (08-03)

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 6

**Complete if Known**

Application Number	10/602,692
Filing Date	June 20, 2003
First Named Inventor	Sommadossi <i>et al.</i>
Group Art Unit	1623
Examiner Name	Unassigned
Attorney Docket Number	06171.105071 IDX 1006 CON3

3425649 1

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pgs, Clms, Lns, Where Relevant Passages/Relevant Figs Appear
		Number	Kind Code (if known)			
	AA	3,480,613	A	Walton <i>et al.</i>	11-25-1969	
	AB	5,977,061	A	De Clercq	11-02-1999	
	AC	6,340,690	B1	Bachand <i>et al.</i>	01-22-2002	
	AD	6,348,587	B1	Schinazi <i>et al.</i>	02-2002	
	AE	6,395,716	B1	Gosselin <i>et al.</i> (Novirio / Idenix)	05-28-2002	
	AF	6,444,652	B1	Gosselin <i>et al.</i> (Novirio / Idenix)	09-03-2002	
	AG	6,573,248	B1	Ramasamy <i>et al.</i>	06-03-2003	
	AH	2002/0019363	A1	Ismaili <i>et al.</i>	02-2002	
	AI	2002/0055483	A1	Watanabe <i>et al.</i>	05-09-2002	
	AJ	2002/0147160	A1	Bhat <i>et al.</i>	10-10-2002	
	AK	2003/008841	A1	Devos <i>et al.</i>	01-09-2003	
	AL	2003/028013	A1	Wang <i>et al.</i>	02-06-2003	
	AM	2003/0050229	A1	Sommadossi <i>et al.</i>	03-13-2003	
	AN	2003/0060400	A1	LaColla <i>et al.</i>	03-27-2003	
	AO	2003/0083307	A1	Devos <i>et al.</i>	05-01-2003	
	AP	2003/0087873	A1	Stuyver <i>et al.</i>	05-08-2003	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number	Kind Code <sup>2</sup> (if known)				
	AQ	FR	1,521,076	A	Merck & Co. Inc.	04-12-1968		
	AR	FR	1,581,628	A	Merck & Co. Inc.	09-19-1969		
	AS	FR	2,662,165	A	Univ. Paris Curie	11-22-1991		
	AT	GB	1,163,103	A	Merck & Co. Inc.	09-04-1969		
	AU	GB	1,209,654	A	Merck & Co. Inc.	10-21-1970		
	AV	JP	63-215694	A	Yamasa Shoyu Co. Ltd.	09-08-1988		
	AW	JP	06-228186	A	Yamasa Shoyu Co. Ltd.	08-16-1994		
	AX	WO	98/16184	A2	ICN Pharmaceuticals	04-23-1998		
	AY	WO	99/43691	A1	Emory U.; U.Ga.R.F.	02-09-1999		
	AZ	WO	00/09531	A2	Novirio Pharm. (Idenix)	02-24-2000		
	AAA	WO	01/32153	A2	Biochem Pharma	05-10-2001		

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/602,692
				Filing Date	June 20, 2003
				First Named Inventor	Sommadossi <i>et al.</i>
				Group Art Unit	1623
				Examiner Name	Unassigned
Sheet	2	of	6	Attorney Docket Number	06171.105071 IDX 1006 CON3

3425649 1

FOREIGN PATENT DOCUMENTS								
Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD- YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number	Kind Code <sup>2</sup> (if known)				
	BA	WO	01/60315	A2	Biochem Pharma	08-23-2001		
	BB	WO	01/68663	A1	ICN Pharmaceuticals	09-20-2001		
	BC	WO	01/79246	A2	Pharmasset	10-25-2001		
	BD	WO	01/90121	A2	Novirio Pharm. (Idenix)	11-29-2001		
	BE	WO	01/91737	A2	Novirio Pharm. (Idenix)	06-12-2001		
	BF	WO	01/92282	A2	Novirio Pharm. (Idenix)	06-12-2001		
	BG	WO	01/96353	A2	Novirio Pharm. (Idenix)	12-20-2001		
	BH	WO	02/03997	A1	ICN Pharmaceuticals	01-17-2002		
	BI	WO	02/18404	A2	F. Hoffmann-La Roche	03-07-2002		
	BJ	WO	02/32920	A2	Pharmasset	04-25-2002		
	BK	WO	02/48165	A2	Pharmasset	06-20-2002		
	BL	WO	02/057287	A2	Merck & Co. Inc.	07-25-2002		
	BM	WO	02/057425	A2	Merck & Co. Inc.	07-25-2002		
	BN	WO	02/070533	A2	Pharmasset	09-12-2002		
	BO	WO	02/094289	A1	F. Hoffmann-La Roche	11-28-2002		
	BP	WO	02/100415	A2	F. Hoffmann-La Roche	12-19-2002		
	BQ	WO	03/026589	A2	Idenix; CNRS; U. Montp.	04-03-2003		
	BR	WO	03/026675	A1	Idenix; CNRS; U. Montp.	04-03-2003		
	BS	WO	03/051899	A1	Ribapharm	06-26-2003		
	BT	WO	03/061385	A1	Ribapharm	07-31-2003		
	BU	WO	03/061576	A2	Ribapharm	07-31-2003		
	BV	WO	03/062255	A2	Ribapharm	07-31-2003		
	BW	WO	03/062256	A1	Ribapharm	07-31-2003		
	BX	WO	03/062257	A1	Ribapharm	07-31-2003		
	BY	WO	03/063771	A2	Pharmasset	08-07-2003		
	BZ	WO	03/068162	A2	Pharmasset	08-21-2003		
	BAA	WO	03/072757	A2	Biota Inc.	09-04-2003		
	BAB	WO	03/093290	A2	Genelabs Technologies	11-13-2003		
	BAC	WO	04/002422	A2	Idenix; Univ.D.S.Cagliari	01-08-2004		
	BAD	WO	04/002999	A2	Idenix; Univ.D.S.Cagliari	01-08-2004		

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

3

of

6

**Complete if Known**

Application Number

10/602,692

Filing Date

June 20, 2003

First Named Inventor

Sommadosi *et al.*

Group Art Unit

1623

Examiner Name

Unassigned

Attorney Docket Number

06171.105071 IDX 1006 CON3

3425649 1

**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	CA	ALTMANN <i>et al.</i> , "The synthesis of 1'-methyl carbocyclic thymidine and its effect on nucleic acid duplex stability," <i>Synlett, Thieme Verlag, Stuttgart, De</i> , 10:853-855 (1994).	
	CB	BAGINSKI, S. G., <i>et al.</i> , "Mechanism of action of a pestivirus antiviral compound," <i>PNAS USA</i> , 97(14):7981-7986 (2000).	
	CC	BEIGELMAN, L.N., <i>et al.</i> , "Epimerization during the acetolysis of 3-O-acetyl-5-O-benzoyl-1,2-O-isopropylidene-3-C-methyl- $\alpha$ ,D-ribofuranose. Synthesis of 3'-C-methylnucleosides with the $\beta$ -D-ribo- and $\alpha$ -D-arabino configurations," <i>Carbohydrate Research</i> , 181:77-88 (1988).	
	CD	BEIGELMAN, L.N., <i>et al.</i> , "A general method for synthesis of 3'-C-alkylnucleosides," <i>Nucleic Acids Symp. Ser.</i> , 9:115-118 (1981).	
	CE	BERENGUER, M., <i>et al.</i> , "Hepatitis B and C viruses: Molecular identification and targeted antiviral therapies," <i>Proceedings of the Association of American Physicians</i> , 110(2), 98-112 (1998).	
	CF	CARROLL, S.S., <i>et al.</i> , "Inhibition of hepatitis C virus RNA replication by 2'-modified nucleoside analogs," <i>The Journal of Biological Chemistry</i> , 278(14):11979-11984 (2003).	
	CG	CZERNECKI, S., <i>et al.</i> , "Synthesis of various 3'-branched 2',3'-unsaturated pyrimidine nucleosides as potential anti-HIV agents," <i>J. Org. Chem.</i> , 57:7325-7328 (1992).	
	CH	De FRANCESCO, R., <i>et al.</i> , "Approaching a new era for hepatitis C virus therapy: Inhibitors of the NS3-4A serine protease and the NS5B RNA-dependent RNA polymerase," <i>Antiviral Research</i> , 58:1-16 (2003).	
	CI	FAIVRE-BUET, V., <i>et al.</i> , "Synthesis of 1'-deoxypsycifuranosyl-deoxynucleosides as potential anti-HIV agents," <i>Nucleosides &amp; Nucleotides</i> , 11(7):1411-1424 (1992).	
	CJ	FARKAS, J., <i>et al.</i> , "Nucleic acid components and their analogues. XCIV. Synthesis of 6-amino-9-(1-deoxy- $\beta$ -D-psicofuranosyl)purine," <i>Collect. Czech. Chem. Commun.</i> 32:2663-2667 (1967).	
	CK	FARKAS, J., <i>et al.</i> , "Nucleic acid components and their analogues. LXXIX. Synthesis of methyl 1-deoxy-D-psicofuranosides substituted at C <sub>11</sub> with halo atoms or a mercapto group," <i>Collect. Czech. Chem. Commun.</i> , 31:1535-1543 (1996).	
	CL	FEDOROV, I.I., <i>et al.</i> , "3'-C-Branched 2'-deoxy-5-methyluridines: Synthesis, enzyme inhibition, and antiviral properties," <i>J. Med. Chem.</i> , 35(24):4567-4575 (1992).	
	CM	FRANCHETTI, P., <i>et al.</i> , "2'-C-Methyl analogues of selective adenosine receptor agonists: synthesis and binding studies," <i>J. Med. Chem.</i> , 41(10):1708-1715 (1998).	
	CN	GROUILLER, A., <i>et al.</i> , "Novel <i>p</i> -toluenesulfonylation and thionocarbonylation of unprotected thymine nucleosides," <i>Synlett</i> , 1993, 221-222 (March 1993).	
	CO	HARAGUCHI, K., <i>et al.</i> , "Preparation and reactions of 2'- and 3'- vinyl bromides of uracil nucleosides: Versatile synthons for anti-HIV agents," <i>Tetrahedron Letters</i> , 32(28):3391-3394 (1991).	

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 4 of 6

**Complete if Known**

Application Number	10/602,692
Filing Date	June 20, 2003
First Named Inventor	Sommadossi <i>et al.</i>
Group Art Unit	1623
Examiner Name	Unassigned
Attorney Docket Number	06171.105071 IDX 1006 CON3

3425649 1

**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	DA	HARAGUCHI, K., <i>et al.</i> , "Stereoselective synthesis of 1'-C-branched uracil nucleosides from uridine," <i>Nucleosides &amp; Nucleotides</i> , 14(3-5):417-420 (1995).	
	DB	HARRY-O'KURU, R.E., <i>et al.</i> , "A short, flexible route toward 2'-C-branched ribonucleosides", <i>J. Org. Chem.</i> , 62:1754-1759 (1997). (Scheme 11).	
	DC	HARRY-O'KURU, R.E., <i>et al.</i> , "2'-C-Alkylribonucleosides: Design, synthesis, and conformation," <i>Nucleosides &amp; Nucleotides</i> , 16(7-9):1457-1460 (1997). ["Rogers" in #2; correct name in #7]	
	DD	HATTORI, H., <i>et al.</i> , "Nucleosides and nucleotides. 175. Structural requirements of the sugar moiety for the antitumor activities of new nucleoside antimetabolites, 1-(3-C-ethynyl-b-D-ribo-pentofuranosyl)cytosine and -uracil," <i>J. Med. Chem.</i> , 41:2892-2902 (1998).	
	DE	HREBABECKY, H., <i>et al.</i> , "Nucleic acid components and their analogues. CXLIX. Synthesis of pyrimidine nucleosides derived from 1-deoxy-D-psicose," <i>Collect. Czech. Chem. Commun.</i> , 37:2059-2065 (1972).	
	DF	HREBABECKY, H., <i>et al.</i> , "Synthesis of 7- and 9β-D-psicofuranosylguanine and their 1'-deoxy derivatives," <i>Collect. Czech. Chem. Commun.</i> , 39:2115-2123 (1974).	
	DG	IINO, T., <i>et al.</i> , "Nucleosides and nucleotides. 139. Stereoselective synthesis of (2'S)-2'-C-alkyl-2'-deoxyuridines," <i>Nucleosides and Nucleotides</i> , 15(1-3):169-181 (1996).	
	DH	ITOH, Y., <i>et al.</i> , "Divergent and stereocontrolled approach to the synthesis of uracil nucleosides branched at the anomeric position," <i>J. Org. Chem.</i> , 60(3):656-662 (1995).	
	DI	JOHNSON, C.R., <i>et al.</i> , "3'-C-Trifluoromethyl ribonucleosides," <i>Nucleosides &amp; Nucleotides</i> , 14(1&2):185-194 (1995).	
	DJ	KAWANA, M., <i>et al.</i> , "The deoxygenation of tosylated adenosine derivatives with Grignard reagents," <i>Nucleic Acids Symp. Ser.</i> , 17:37-40 (1986).	
	DK	LAVARE, S., <i>et al.</i> , "3'-Deoxy-3'-C-trifluoromethyl nucleosides: Synthesis and antiviral evaluation," <i>Nucleosides &amp; Nucleotides</i> , 17(12):2267-2280 (1998).	
	DL	LEYSEN, P. <i>et al.</i> , "Perspectives for the treatment of infections with <i>Flaviviridae</i> ," <i>Clinical Microbiology Reviews</i> (Washington, D.C.), 13(1):67-82 (January 2000).	
	DM	MARTIN, X., <i>et al.</i> , "Intramolecular hydrogen bonding in primary hydroxyl of thymine 1-(1-deoxy-β-D-psicofuranosyl) nucleoside," <i>Tetrahedron</i> , 50(22):6689-6694 (1994).	
	DN	MATSUDA, A., <i>et al.</i> , "Radical deoxygenation of tert-alcohols in 2'-branched-chain sugar pyrimidine nucleosides: Synthesis and antileukemic activity of 2'-deoxy-2'(S)-methylcytidine," <i>Chem. Pharm. Bull.</i> , 35(9):3967-3970 (1987).	
	DO	MATSUDA, A., <i>et al.</i> , "Alkyl addition reaction of pyrimidine 2'-ketonucleosides: Synthesis of 2'-branched-chain sugar pyrimidine nucleosides (Nucleosides and Nucleotides. LXXXI)," <i>Chem. Pharm. Bull.</i> , 36(3):945-953 (1988).	

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

5

of

6

**Complete if Known**

Application Number

10/602,692

Filing Date

June 20, 2003

First Named Inventor

Sommadosi *et al.*

Group Art Unit

1623

Examiner Name

Unassigned

Attorney Docket Number

06171.105071 IDX 1006 CON3

3425649 1

**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	EA	MATSUDA, A., <i>et al.</i> , "Nucleosides and Nucleotides. 94. Radical deoxygenation of <i>tert</i> -alcohols in 1-(2-C-alkylpentofuranosyl)pyrimidines: Synthesis of (2'S)-2'-deoxy-2'-C-methylcytidine, an antileukemic nucleoside," <i>J. Med. Chem.</i> , 34:234-239 (1991).	
	EB	MATSUDA, A., <i>et al.</i> , "Nucleosides and Nucleotides. 104. Radical and palladium-catalyzed deoxygenation of the allylic alcohol systems in the sugar moiety of pyrimidine nucleosides," <i>Nucleosides &amp; Nucleotides</i> , 11(2/4):197-226 (1992).	
	EC	MIKHAILOV, S.N., <i>et al.</i> , "Synthesis and properties of 3'-C-methylnucleosides and their phosphoric esters," <i>Carbohydrate Research</i> , 124:75-96 (1983).	
	ED	MIKHAILOV, S.N., <i>et al.</i> , "Substrate properties of C'-methylnucleoside and C'-methyl-2'-deoxynucleoside 5'-triphosphates in RNA and DNA synthesis reactions catalysed by RNA and DNA polymerases," <i>Nucleosides &amp; Nucleotides</i> , 10(1-3):339-343 (1991).	
	EE	MIKHAILOV, S.N., <i>et al.</i> , "Hydrolysis of 2'- and 3'-C-methyluridine 2'-c3'-cyclic monophosphates and interconversion and dephosphorylation of the resulting 2'- and 3'-monophosphates: Comparison with the reactions of uridine monophosphates," <i>J. Org. Chem.</i> , 57 (15):4122-4126 (1992).	
	EF	NUTT, R.F., <i>et al.</i> , "Branched-chain sugar nucleosides. III. 3'-C-methyladenine," <i>J. Org. Chem.</i> , 33:1789-1795 (1968).	
	EG	OIVANEN, M., <i>et al.</i> , "Additional evidence for the exceptional mechanism of the acid-catalyzed hydrolysis of 4-oxypyrimidine nucleosides: Hydrolysis of 1-(1-alkoxyalkyl)uracils, seconucleosides, 3'-C-alkyl nucleosides and nucleoside 3',5'-cyclic monophosphates," <i>J. Chem. Soc. Perkin Trans. 2</i> , 1994:309-314 (1994).	
	EH	ONG, S.P., <i>et al.</i> , "Synthesis of 3'-C-methyladenosine and 3'-C-methyluridine diphosphates and their interaction with the ribonucleoside diphosphate reductase from <i>Corynebacterium nephridii</i> ," <i>Biochemistry</i> , 31(45):11210-11215 (1992).	
	EI	Oral Session V, Hepatitis C Virus, Flaviviridae; 16 <sup>th</sup> International Conference on Antiviral Research (April 27, 2003, Savannah, Ga.) p A75-77.	
	EJ	PAN-ZHOU, X-R, <i>et al.</i> , "Differential effects of antiretroviral nucleoside analogs on mitochondrial function in HepG2 cells," <i>Antimicrob. Agents Chemother.</i> , 44:496-503 (2000).	
	EK	ROSENTHAL, A., <i>et al.</i> , "Branched-chain sugar nucleosides. Synthesis of 3'-C-ethyl (and 3'-C-butyl)uridine <i>Carbohydrate Research</i> , 79:235-242 (1980).	
	EL	SAMANO, V., <i>et al.</i> , "Synthesis and radical-induced ring-opening reactions of 2'-deoxyadenosine-2'-spirocyclopropane and its uridine analogue. Mechanistic probe for ribonucleotide reductases," <i>J. Am. Chem. Soc.</i> , 114:4007-4008 (1992).	

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

6

of

6

**Complete if Known**

Application Number

10/602,692

Filing Date

June 20, 2003

First Named Inventor

Sommadosi *et al.*

Group Art Unit

1623

Examiner Name

Unassigned

Attorney Docket Number

06171.105071 IDX 1006 CON3

3425649 1

**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	FA	SAMANO, V., <i>et al.</i> , "Nucleic acid related compounds. 77. 2',3'-Didehydro-2',3'-dideoxy-2'(and 3')-methyl nucleosides via [3,3]-sigmatropic rearrangements of 2'(and 3')-methylene-3'(and 2')-O-thiocarbonyl derivatives and radical reduction of a 2'-chloro-3'-methylene analogue," <i>Can. J. Chem.</i> , 71:186-191 (1993).	
	FB	SCHMIT, C., <i>et al.</i> , "The effects of 2'- and 3'-alkyl substituents on oligonucleotide hybridization and stability," <i>Bioorganic &amp; Medicinal Chemistry Letters</i> , 4(16):1969-1974 (1994). ["Altmann"]	
	FC	SERAFINOWSKI, P.J., <i>et al.</i> , "New method for the preparation of some 2'- and 3'-trifluoromethyl-2',3'-dideoxyuridine derivatives," <i>Tetrahedron</i> (Elsevier Science Publishers), 56(2):333-339 (1999).	
	FD	SHARMA, P.K., <i>et al.</i> , "Synthesis of 3'-trifluoromethyl nucleosides as potential antiviral agents," <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 19(4):757-774 (2000).	
	FE	SOMMADOSSI J-P, <i>et al.</i> , "Comparison of cytotoxicity of the (-)- and (+)-enantiomer of 2',3'-dideoxy-3'-thiacytidine in normal human bone marrow progenitor cells" <i>Biochemical Pharmacology</i> , 44:1921-1925 (1992).	
	FF	SOMMADOSSI J-P, <i>et al.</i> , "Toxicity of 3'-azido-3'-deoxythymidine and 9-(1,3-dihydroxy-2-propoxymethyl)guanine for normal human hematopoietic progenitor cells in vitro" <i>Antimicrobial Agents and Chemotherapy</i> , 31:452-454 (1987).	
	FG	TRITSCH, D., <i>et al.</i> , "3'-β-ethynyl and 2'-deoxy-3'-β-ethynyl adenosines: First 3'-β-branched adenosines substrates of adenosine deaminase," <i>Bioorganic &amp; Medicinal Chemistry Letters</i> , 10:139-141 (2000).	
	FH	TUNITSKAYA, V.L., <i>et al.</i> , "Substrate properties of C'-methyl UTP derivatives in T7 RNA polymerase reactions. Evidence for N-type NTP conformation," <i>FEBS Letters</i> , 400:263-266 (1997).	
	FI	USUI, H., <i>et al.</i> , "Synthesis of 2'-deoxy-8,2'-ethanoadenosine and 3'-deoxy-8,3'-ethanoadenosine (Nucleosides and Nucleotides. LXIV)," <i>Chem. Pharm. Bull.</i> , 34(1):15-23 (1986).	
	FJ	WALCZAK, K., <i>et al.</i> , "Synthesis of 1-(3-alkyl-2,3-dideoxy-D-pentofuranosyl)uracils with potential anti-HIV activity," <i>Acta Chemica Scand.</i> , 45:930-934 (1991).	
	FK	WALTON, E., <i>et al.</i> , "Branched-chain sugar nucleosides. V. Synthesis and antiviral properties of several branched-chain sugar nucleotides," <i>J. Med. Chem.</i> , 12:306-309 (1969).	
	FL	WOLFE, M.S., <i>et al.</i> , "A concise synthesis of 2'-C-methylribonucleosides," <i>Tetrahedron Letters</i> , 36(42):7611-7614 (1995).	
	FM	WU, J.-C., <i>et al.</i> , "A new stereospecific synthesis of [3.1.0] bicyclic cyclopropano analog of 2',3'-dideoxyuridine, <i>Tetrahedron</i> , 46(7):2587-2592 (1990).	

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.